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97279 JERUSALEM (IL). PESACH, Benny [IL/IL]; 18 SHIR HASHIRIM STREET, 48072 ROSH-HA'AYIN (IL).

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(74) Agents: **FENSTER, Paul** et al.; FENSTER & COMPANY, INTELLECTUAL PROPERTY 2002 LTD., P. O. BOX 10256, 49002 PETACH TIKVA (IL).

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(71) Applicant (for all designated States except US): **GLUCON INC.** [US/US]; 644 COLLEGE AVENUE, BOULDER, Colorado 80302 (US).

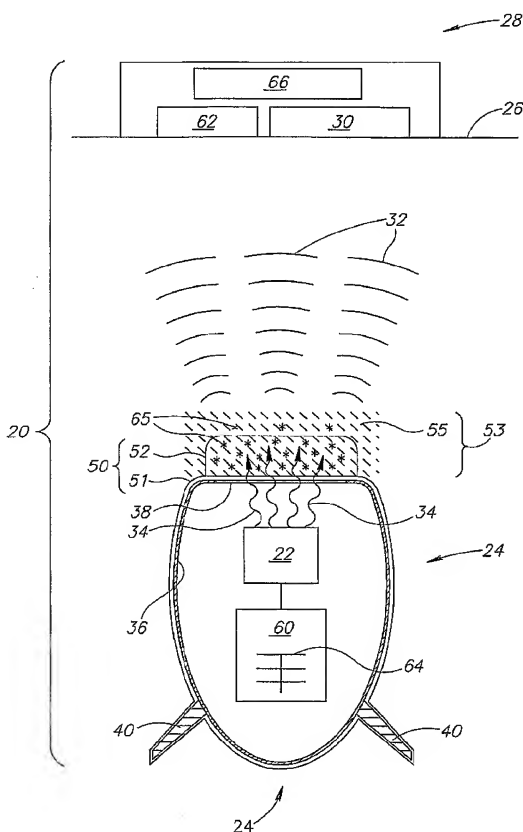
(72) Inventors; and

(75) Inventors/Applicants (for US only): **NAGAR, Ron** [IL/IL]; 32 FRUG STREET, 63417 TEL-AVIV (IL). **BITTON, Gabriel** [IL/IL]; 621/5 HADAF HAYOMI STREET,

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(54) Title: **GLUCOMETER COMPRISING AN IMPLANTED LIGHT SOURCE**



(57) Abstract: Apparatus for assaying an analyte in a body comprising: at least one light source implanted in the body controllable to illuminate a tissue region in the body with light at at least one wavelength that is absorbed by the analyte and as a result generates photoacoustic waves in the tissue region; at least one acoustic sensing transducer coupled to the body that receives acoustic energy from the photoacoustic waves and generates signals responsive thereto; and a processor that receives the signals and processes them to determine a concentration of the analyte in the illuminated tissue region.



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